

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.15**SOURCE INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** SIR-003221**Date Inspected:** 21-Apr-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Changxing Dao, Shanghai**Quality Control Contact:** Don Walton**Quality Control Present:** Yes No**Material transfer:** Yes No N/A**Sampled Items:** Yes No N/A**Stock Transfer:** Yes No N/A**OK to Cut:** Yes No N/A**Rebar Test Witness:** Yes No N/A**Delayed/Cancelled:** Yes No N/A**Other:** Coatings Inspection**Bridge No:** 34-0006**Component:** Sub-Assemblies (OBG) and Sub-Assemblies**Bid Item:** 77,78,79**Lot No:****Summary of Items Observed:**

On this date Caltrans Office of Structural Materials (OSM) Quality Assurance (QA) NACE III coating inspector, Mr. Kenneth W. Cason Jr. arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island in Shanghai, China. The purpose of the coating inspections is to monitor the surface preparation and coating applications for the SAS Bay Bridge project. This QA NACE III coating inspector observed the following:

**Sub-Assemblies (OBG)**

Crash Barrier Cover Plates (192 Each) and Bike Path Panel BK8A-002, NOI Number 6269: In preparation for undercoat installation and in accordance with project specifications, this inspector along with ABF and ZPMC Quality Assurance/Control representatives observed the surface preparation on Crash Barrier Cover Plates (192 Each) and Bike Path Panel BK8A-002. Test results recorded x3 surface profile readings in the range of 74 to 84  $\mu\text{m}$  and x1 soluble salts reading of 8.6 ( $\mu\text{s/cm}$ ). ABF Quality Assurance personnel instructed ZPMC to re-work and re-submit for inspection due to additional required grinding and blasting.

Façade Cover Plates External Surfaces (17 Each), NOI Number 6270: In preparation for finish coat Interfine 979 Polysiloxane installation and in accordance with project specifications and SSPC-SP 1, this inspector along with ABF and ZPMC Quality Assurance/Control representatives observed the surface preparation on Façade Cover Plates External Surfaces (17 Each). No discrepancies noted and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

Crash Barriers External Surfaces (4 Each), NOI Number 6271: In preparation for mist coat installation of Interfine

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979 Polysiloxane, the Interzinc 22 undercoat on Crash Barriers External Surfaces (4 Each) were tested in accordance with SSPC-SP 1 (Surface Cleanliness) and SSPC-PA 2 Dry Film Thickness (DFT). ABF Quality Assurance personnel instructed ZPMC to re-work and re-submit for inspection due to holidays and high DFT readings, runs, sags and uncured Interzinc 52 undercoat.

Crash Barriers External Surfaces (3 Each), NOI Number 6272: In preparation for finish coat Interfine 979 Polysiloxane installation and in accordance with project specifications and SSPC-SP 1, this inspector along with ABF and ZPMC Quality Assurance/Control representatives observed the surface preparation on Crash Barriers External Surfaces (3 Each). ABF Quality Assurance personnel instructed ZPMC to re-work and re-submit for inspection due to holidays (pin holes).

Crash Barrier W2-SB20-001 PP113.5-PP113, NOI Number 6272: In accordance with project specifications ABF and ZPMC Quality Assurance/Control representatives observed the surface condition on Crash Barrier W2-SB20-001 PP113.5-PP113 for dry film thickness (DFT) and final VT compliance. No discrepancies noted and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

Bike Path Panels BK4B-001 and BK4A-013, NOI Number 6274: In preparation for finish coat Interfine 979 Polysiloxane installation and in accordance with project specifications and SSPC-SP 1, this inspector along with ABF and ZPMC Quality Assurance/Control representatives observed the surface preparation on Bike Path Panels BK4B-001 and BK4A-013. ABF Quality Assurance personnel instructed ZPMC to re-work and re-submit for inspection due to holidays and high DFT readings, runs and sags.

Bike Path Panel BK4A-014, NOI Number 6274: In preparation for finish coat Interfine 979 Polysiloxane installation and in accordance with project specifications and SSPC-SP 1, this inspector along with ABF and ZPMC Quality Assurance/Control representatives observed the surface preparation on Bike Path Panel BK4A-014. ASTM D4752 (MEK Resistance of Ethyl Silicate (Inorganic) Zinc-Rich Primers by Solvent Rub) was conducted with x 1 @ grade 4 recorded. Also tested in accordance with ISO 11127-6 and ISO 11127-7, (soluble salts) x1 with readings recorded @ 16.7 ( $\mu\text{s}/\text{cm}$ ). ABF Quality Assurance personnel instructed ZPMC to re-work and re-submit for inspection due to over spray found on surface.

Crash Barrier Cover Plates (192 Each) and Bike Path Panel BK8A-002, NOI Number 6275: In preparation for undercoat installation and in accordance with project specifications, this inspector along with ABF and ZPMC Quality Assurance/Control representatives observed the surface preparation on Crash Barrier Cover Plates (192 Each) and Bike Path Panel BK8A-002. No discrepancies noted and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

Galvanized Traveler Rails (43 Each) and Facade Cover Plate Back Side 150mm Edges (18 Each), NOI Number 6277: In accordance with project specifications ABF and ZPMC Quality Assurance/Control representatives observed the surface condition on Galvanized Traveler Rails (43 Each) and Facade Cover Plate Back Side 150mm Edges (18 Each) for dry film thickness (DFT) and final VT compliance. ABF Quality Assurance personnel instructed ZPMC to re-work and re-submit for inspection Galvanized Traveler Rails (43 Each) due to holidays on surface. No discrepancies noted on Facade Cover Plate Back Side 150mm Edges (18 Each) and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

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Splices X3294H (2 Each), X4094 (19 Each) and X4099 (60 Each), NOI Number 6279: In accordance with project specifications ABF and ZPMC Quality Assurance/Control representatives observed the surface condition on Splices X3294H (2 Each), X4094 (19 Each) and X4099 (60 Each) for dry film thickness (DFT) compliance. No discrepancies noted and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

Galvanized Traveler Rails (13 Each), NOI Number 6281: In preparation for undercoat installation and in accordance with project specifications, this inspector along with ABF and ZPMC Quality Assurance/Control representatives observed the surface preparation on Galvanized Traveler Rails (13 Each). No discrepancies noted and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

### Sub-Assemblies (Tower)

Tower Head Sub-assembly Plates (OUTSIDE CHANNEL ONLY) ESD1-7C6-2 and WSD1-7C6-4, NOI Number T2053: In accordance with project specifications ABF and ZPMC Quality Assurance/Control representatives observed the surface condition on Tower Head Sub-assembly Plates (OUTSIDE CHANNEL ONLY) ESD1-7C6-2 and WSD1-7C6-4 for dry film thickness (DFT) compliance. No discrepancies noted and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

Tower Splices PL6-75 (18 Each), PL6-69 (10 Each), BP6-8 (2 Each) and BP6-7 (2 Each), NOI Number T2054: In accordance with project specifications ABF and ZPMC Quality Assurance/Control representatives observed the surface condition on Tower Splices PL6-75 (18 Each), PL6-69 (10 Each), BP6-8 (2 Each) and BP6-7 (2 Each) for dry film thickness (DFT) compliance. No discrepancies noted and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

### Office

This Quality Assurance Inspector (QA) reviewed, recorded and entered data from notice of inspection requests for the purpose of tracking and compliance to contract documents.

Note: Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

### Summary of Conversations:

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact , who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Cason,Kenneth
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Quality Assurance Inspector
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<b>Reviewed By:</b>	Miller,Mark
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QA Reviewer
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